Teaching Child Poverty

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Talk Outline

• Stylized facts about “disadvantage” and inequality wrt to children
• Descriptive differences in achievement by early disadvantage
• Explanatory pathways & developmental timing
• Discussion of effective policy and programmatic responses to poverty
Poverty and children

• Children provide an interesting angle to understand social (and biological) processes of inequality
  • Tends to evoke sympathy, children experience the consequences of their parents inadequacies
    • Trends in child poverty mirror trends in adult poverty
  • BUT childrearing practices are closely linked to cultural processes, so Oscar Lewis looms large
• Easy to overlook heterogeneity among poor children
  • Hopefully avoid pathologizing poor children and recognize resilience
### Fifteen-year Poverty Experiences of Children in the Panel Study of Income Dynamics born between 1975-1987, by Race and Maternal Characteristics at Birth

<table>
<thead>
<tr>
<th></th>
<th>Ave. Number of Years Poor</th>
<th>Never Poor</th>
<th>Poor for at least 5 years</th>
<th>Poor for at least 8 years</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Total Sample</strong></td>
<td>1.81</td>
<td>65%</td>
<td>15%</td>
<td>10%</td>
</tr>
<tr>
<td><strong>African American</strong></td>
<td>5.53</td>
<td>30%</td>
<td>46%</td>
<td>37%</td>
</tr>
<tr>
<td><strong>White</strong></td>
<td>0.93</td>
<td>75%</td>
<td>7%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Unmarried Mother</strong></td>
<td>5.39</td>
<td>24%</td>
<td>46%</td>
<td>33%</td>
</tr>
<tr>
<td><strong>Mother Education: &lt; High School Degree</strong></td>
<td>5.03</td>
<td>31%</td>
<td>44%</td>
<td>33%</td>
</tr>
</tbody>
</table>

Notes: Calculations of the Panel Survey of Income Dynamics conducted by Kathleen Ziol-Guest. Figures in this table are based on weights that adjust for differential sampling and response rates.
Kindergarteners living in neighborhoods with concentrated poverty in 1998 and 2010 (ECLSK)
Low-income children enter school with low-levels of academic skills & these differences persist
Percent of Children able to Recognize Letters, By SES (ECLSK)
Neighborhood Poverty Gradients in School Readiness are found within Family Poverty Categories

**Figure 1:** Average Reading Scores by Neighborhood & Family Poverty, ECLSK

**Figure 2:** Average Math Scores by Neighborhood & Family Poverty, ECLSK
Low-income children enter school with higher levels of problem behavior & these differences persist.
Figure 4: Average Externalizing Scores by Neighborhood & Family Poverty, ECLSK
Family income relative to 1970

Source: Duncan & Murnane (2011) calculations based on data from the U.S. Bureau of the Census. Shaded areas indicate recession years.
Achievement gaps by race and income, by birth year

Difference in standardized test scores

Black/white gap based on NAEP data

Income gap based on various national surveys

Source: Reardon, 2011
Figure 3: College graduation rates for low and high income children

Source: Calculations based on Bailey and Dynarski (2011). Low and high incomes are defined as the bottom and top quartiles of the parent income distribution.
Changes in adult earnings and work hours associated with a $5,000 per year increase in family income in different childhood stages

From Duncan et al., 2012
How much does childhood poverty really matter?

• From a scholarly perspective it’s hard to know...

• “When we ask about the relationship between poverty and child outcomes it is not completely clear whether we are asking about the low income of poor families or the complex set of circumstances that results in low income. “ Mayer (2010)
How much does childhood poverty really matter?

• Theory:
  – Increasingly good theoretical models (pieces of which have been confirmed)

• Empirically:
  – Never had a good experiment of income support
  – But, lots of clever attempts to use quasi-experiments to answer the question
    • On average these show larger effects than non-clever approaches
    • Some puzzles to figure out
An Explanatory Model

Childhood poverty
- Stimulation
  - Cognitive stimulation in the home
  - Type and quality of child care
  - Quality of schools and neighborhood
- Stress
  - Maternal mental health
  - Parenting

Brain & physiological development

Child Achievement, Behavior and Health

Adult Achievement, Behavior and Health

Contexts: neighborhoods, schools, peers
Expansions in EITC during 1990s

Figure 1a: Federal EITC Schedules for Families with Two or More Children (2000 Dollars)

Source: Dahl & Lochner, 2009
Effects of EITC expansion on children’s test scores and mothers’ health

Dahl and Lochner, 2012; Evans and Garthwaite, 2009
Distribution of Casino Revenues to American Indian Families

Source: Akee et al., 2009
Distribution of Casino Earnings (Akee et al., 2009)

• Panel of 1420 children (ages 9-13 followed through ages 19-21)
  – American Indian n=350, non-Am. Indian n=1,070

• Compare AI and non-AI cohorts of children with casino income to those without (difference in difference approach)
Casino Earnings Improve Youth Educational Attainment

Estimated Effect of Having a AI Parent

Source: Akee et al., 2009
Notable gaps...

- Physical Health
- Behavior
- Persistence of effects overtime
- Developmental timing
The Importance of Early Childhood

Neural Circuits are Wired in a Bottom-Up Sequence
(700 synapses formed per second in the early years)

Sensory Pathways (Vision, Hearing)
Language
Higher Cognitive Function

FIRST FIVE YEARS

Neural correlates of socioeconomic status in the developing human brain
Neuroscience shows strong SES disparities in tests of:

- language
- memory
- executive function
More income is associated with larger brain surface area among low-income families

Noble et al,
Nature Neuroscience
Figure 1. Total Gray Matter Growth in the First 3 Years of Life, by SES

Note: SES = socioeconomic status.
Source: Hanson et al. 2013.
Programs and Policy Responses

• What matters?
  – Money vs. other disadvantages vs. goods vs. stress

• What can be most easily changed?
  – Parental behavior vs. mental health vs. living conditions vs. developmental processes

Simplify to categories

1. Economic/employment parent programs
2. General Parenting programs
3. Direct child interventions
4. Place-based interventions
Programs and Policy Responses

• Emphasis on employment conditioned income supports to improve family income
  • EITC, Income Supplements, Casino revenues
  • Disappointing evidence from Conditional Cash Transfers (ONYC)

• But, how easily generalized to other types of programs?
  • Some might seem like small leaps Child Tax Credit, SNAP
  • Others, involve other incentives and experiences and thus are likely not direct corollaries child care subsidies
    • Do these programs increase stimulation & reduce stress?
Programs and Policy Responses

• Early Childhood Education for 3-5 year-olds
  • Obama has a new 0-5 policy initiative
  • Consistent evidence of short-run effects non-experimental evidence of long-run benefits from several program models
  • Complicated comparisons across program models
    • More attention to learning how to improve program quality
Innovation & Uncertainty

• Home visiting programs
  • A few intensive highly effective models
  • Much to learn about how to promote positive parent-child interactions
• Approaches in very early childhood (birth-3)
  – How to balance income support & employment
• Place-based approaches (CHZ)
• Combining approaches...
  – Where should building parents’ human capital fit in?
A/V Materials-Lots!

• PBS Frontline: Poor Kids
• Radio
  – This American Life: HCZ, Heckman on Preschool etc.
  – Front and Center- Parenting in Poverty
• Biographical & Ethnographic(ish)
  – Kotlowitz, Rick Bragg, etc.
• Interactive Kids Count data
• National Center for Children in Poverty
References

- Future of Children (old issues 1997 but also forthcoming issue on dual generation programs).